

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

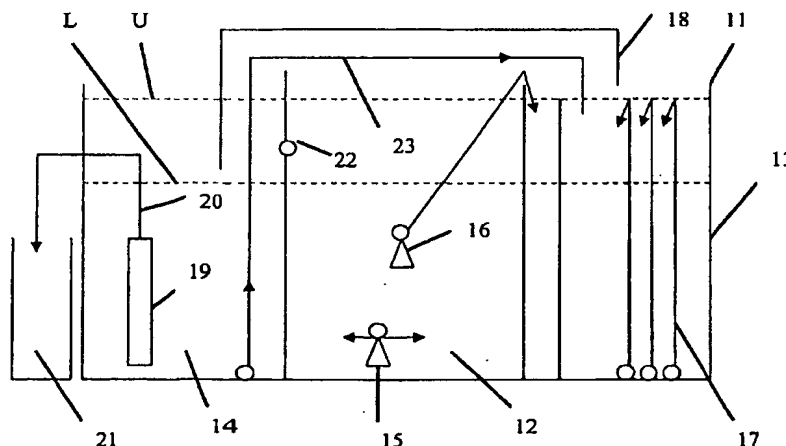
PCT

(10) International Publication Number
WO 2005/061398 A1

- (51) International Patent Classification⁷: C02F 9/00 (74) Agent: GRIFFITH HACK; P O Box 3125, Level 10/167 Eagle Street, Brisbane, Queensland 4000 (AU).
- (21) International Application Number: PCT/AU2004/001820 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 23 December 2004 (23.12.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 2003907125 24 December 2003 (24.12.2003) AU
- (71) Applicant (for all designated States except US): BUSH-WATER HOLDINGS PTY LTD [AU/AU]; Coolum Seascope, Unit 5/2 Second Avenue, Coolum Beach, Queensland 4573 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FOX, John [AU/AU]; 5/21 Maple Street, MALENY, Queensland 4552 (AU). O'BRIEN, Errol [AU/AU]; 301 Oakley Flat Road, MORAYFIELD, Queensland 4506 (AU).
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: A SYSTEM FOR WATER TREATMENT



(57) **Abstract:** A system for water treatment comprising a first treatment area for receiving waste water and aerating the waste water to enhance aerobic bacterial treatment of waste water, a second treatment area for receiving waste water from the first treatment area and circulating waste water within it to enhance bacterial treatment of waste water, a third treatment area configured to receive waste water from the second treatment area and including a filter having at least one membrane for filtering the waste water to substantially remove particulate matter of a predetermined size, an outlet connected to the filter and configured to output filtered waste water from the filter and a transfer means for transferring waste water from the third treatment area to the first treatment area.

BEST AVAILABLE COPY